

City of Arts & Innovation

Transportation Committee

TO: TRANSPORTATION COMMITTEE MEMBERS DATE: JULY 13, 2017

FROM: PUBLIC WORKS DEPARTMENT WARDS: 2, 3, 4 AND 5

SUBJECT: AXLE RESTRICTIONS – ALESSANDRO BOULEVARD, CENTRAL AVENUE, AND VAN BUREN BOULEVARD

ISSUE:

Consideration of establishment of an axle restriction on Alessandro Boulevard/Central Avenue between Trautwein Road and SR-91 and Van Buren Boulevard between Lincoln Avenue and Citrus Heights Drive.

RECOMMENDATION:

That the Transportation Committee recommend that the City Council approve establishment of a "4 or More Axles" restriction on Alessandro Boulevard/Central Avenue between Trautwein Road and SR-91 and Van Buren Boulevard between Lincoln Avenue and Citrus Heights Drive.

BACKGROUND:

The Public Works Department may establish weight limit or axle restrictions to prohibit use of select streets by larger commercial vehicles. These types of restrictions reduce commercial truck traffic on certain roads by directing truck traffic onto arterial or freeways. Weight and axle limit restrictions assist in preserving the pavement and promoting safe use of streets which may have distinctive roadway conditions, are residential in nature, or experience cut-through truck traffic. Such restrictions do not prevent use for the purpose of delivering or picking up of materials or the performance of services in connection with a property within the specific block.

DISCUSSION:

The Public Works Department utilizes both weight limit and axle restrictions to regulate specific truck traffic on select streets. Weight limit restrictions establish maximum truck weight in terms of gross vehicle weight rating (GVWR). Weight limit restrictions are typically utilized on collector and local roadways which handle lower traffic volumes than arterial roadways, are equipped with a thinner asphalt section, have characteristics or configurations that are not conducive to commercial truck traffic (i.e. narrow lane or road widths, limited turning radius, etc.), and/or are experiencing cut-through traffic from trucks attempting to bypass busier, larger arterial roadways.

Axle restrictions do not involve weight or GVWR, but prohibit access to trucks exceeding a specified number of axles. This type of restriction is utilized for select arterial roadways which may be heavily impacted by trucks traffic, appropriate for smaller commercial truck traffic, and/or where very large and heavy trucks may result in excessive damage to the asphalt or create traffic or safety concerns. Axle restrictions are intended to move larger, heavier trucks to other nearby arterial roadways or force them to stay on the highway system which are more appropriate for this type of commercial truck traffic. The City currently has one such restriction in place restricting trucks exceeding 3 axles on Main Street between Columbia Avenue and the SR-60 Freeway.

Proposals to establish weight limit and axle restrictions are initially reviewed by the Transportation Board whose members make recommendation to City Council on the matter. City Council subsequently considers proposed restrictions and must approve each restriction before they can be officially adopted into the City's municipal code.

During the May 11, 2017 Transportation Committee meeting, members requested additional analysis on segments of Alessandro Boulevard/Central Avenue and Van Buren Boulevard where axle restrictions may be appropriate to preserve the pavement, improve operations, and reduce noise and emissions to neighborhoods that are adjacent to these roadways. The Public Works Department assessed truck traffic by using the Federal Highway Administration vehicle classification shown on Figure 1:

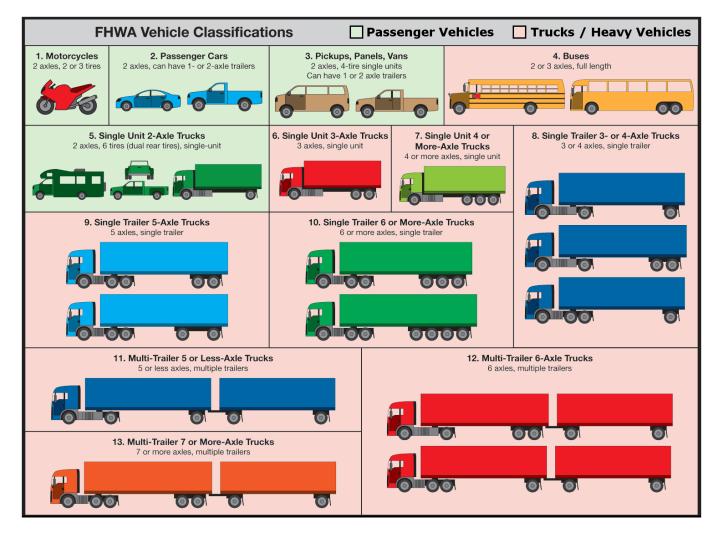


Figure 1: FHWA Vehicle Classifications

Analysis of select roadway segments using the FHWA truck/heavy vehicle classification system revealed that truck percentages along Alessandro Boulevard and Van Buren Boulevard fall below the 3% national average provided in the Highway Capacity Manual. Nonetheless, Alessandro Boulevard/Central Avenue between Trautwein Road and SR-91 and Van Buren Boulevard between Lincoln Avenue and Citrus Heights Drive would benefit from a "4 or More" axles restrictions as few to no commercial businesses are located on these segments of roadway. Table 1 is a compilation of classification studies from May and November 2015, and January and February 2016.

Street	Segment	Number of Trucks - Percent of Trucks			Total	
	_	NB	SB	EB	WB	
** Van Buren	West of Meridian Pkwy			326-1.8%	242-1.3%	568-1.6%
Van Buren Blvd	South of Jurupa Av	544-2.1%	588-2.2%			1132-2.2%
Van Buren Blvd	South of Indiana Av	330-1.9%	366-1.9%			696-1.9%
Van Buren Blvd	North of SR-91	370-1.8%	496-2.3%			866-2.1%
** Van Buren	East of Washington St			325-1.5%	327-1.6%	652-1.5%
Van Buren Blvd	650' West of Dauchy Av			346-1.7%	285-1.4%	631-1.6%
Van Buren Blvd	650' East of Wood Rd			346-1.7%	326-1.6%	672-1.7%
** Van Buren	650' East of Gardner Av			293-1.4%	359-1.7%	652-1.6%
** Van Buren	500' West of King Av			232-1.4%	263-1.7%	495-1.5%
Alessandro Blvd	West of I-215			198-0.9%	274-1.2%	472-1.0%
Alessandro Blvd	North of Trautwein Rd	263-0.9%	281-1.0%			544-0.9%
Alessandro Blvd	North of Chicago Av	288-1.6%	129-0.9%			417-1.3%

Table 1: 24-Hour Vehicle Classification Counts

Alessandro Boulevard/Central Avenue has approximately 540 daily trucks that travel between Trautwein Road and SR-91 and Van Buren Boulevard has approximately 630 daily trucks that travel between Lincoln Avenue and Citrus Heights Drive. Implementation of an axle restriction would reduce truck traffic on these segments and would encourage them to stay on SR-91 and/or I-215 freeways.

During the May 2017 Transportation Committee meeting, the Riverside Police Department supported the use of axle restrictions on arterials roads such as Alessandro Blvd/Central Ave and Van Buren Boulevard as it would facilitate enforcement efforts and eliminate the need to use mobile truck scales to weigh trucks. The Public Works Department would also support the axle restrictions to reduce excessive damage to the asphalt, improve traffic progression, and increase traffic safety as trucks longer to accelerate, decelerate, and stop.

FISCAL IMPACT:

The cost of sign installation is estimated to be \$2,500. Funding is available in the existing Public Works Department budget account 4110100-424143.

Prepared by:	Kris Martinez, Public Works Director
Certified as to	
availability of funds:	Scott Miller, PhD, Chief Financial Officer/City Treasurer
Approved by:	Al Zelinka, FAICP, Assistant City Manager
Approved as to form:	Gary G. Geuss, City Attorney

Attachments:

- 1. Riverside Municipal Code (RMC) Chapter 10.56 Restricted Use of Certain Streets
- 2. Transportation Committee Meeting Minutes, May 11, 2017
- 3. Location Map
- 4. Presentation